

**AGENDA**  
**CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE (CTCDC)**  
**January 31, 2008 Meeting**  
**2100 Thousand Oaks Boulevard, Thousand Oaks, CA 91362**  
**TIME 9:00 AM**

**Organization Items**

- 1 Introduction**
- 2 Approval of Minutes (October 11, 2007 Meeting)**
- 3 Election for the Chairman and Vice Chairman**
- 4. Public Comments**

At this time, members of the public may comment on any item not appearing on the agenda. Matters presented under this item cannot be discussed or acted upon by the Committee at this time. For items appearing on the agenda, the public is invited to make comments at the time the item is considered by the Committee. Any person addressing the Committee will be limited to a maximum of five (5) minutes so that all interested parties have an opportunity to speak. When addressing Committee, please state your name, address, and business or organization you are representing for the record.

**Agenda Items**

**5. Public Hearing**

Prior to adopting rules and regulations prescribing uniform standards and specifications for all official traffic control devices placed pursuant to Section 21400 of the California Vehicle Code (CVC), the Department of Transportation is required to consult with local agencies and hold public hearings.

- |       |  |                                |
|-------|--|--------------------------------|
| 07-16 | Amendment to Section 2B.13 of the CAMUTCD - Speed Limit as Discussed During the Oct 10 Workshop and Oct 11, 2007 CTCDC Regular Meeting (Formerly known as SB 848 as Amended) | (Continued)<br>(Bahadori)      |
| 06-8  | FHWA's Interim Approval for Optional Use of Flashing Yellow Arrow, Traffic Control Devices   | (Continued)<br>(Mansourian)    |
| 04-10 | Slow for the Cone Zone Sign<br>(Adoption Requested by Caltrans)  | (Continued)<br>(Henley)        |
| 08-1  | Amendment to CAMUTCD Section 2B.112(CA)<br>Daylight Headlight Signs (S30(CA) Series)   | (Introduction)<br>(Henley)     |
| 08-2  | Amendment to Handicap Parking Signs and Striping<br>(Required due to AB1531)   | (Introduction)<br>(Henley)     |
| 08-3  | Amendment to CAMUTCD Section 4D.17 Visibility, Shielding, and Positioning of Signal Faces  | (Introduction)<br>(Henley)     |
| 08-4  | Bus Preferential Only Lane Signs<br>(Adoption Requested by the City of SF)   | (Introduction)<br>(Banks/Wong) |

08-5 “No Double-Parking Anytime Commercial Vehicles Included” (Introduction)  
 Double Fine Imposed, ?? AM – ?? AM, ?? PM – ?? PM, MON – FRI  
 (Adoption Requested by the City of SF) (Banks/Wong)

08-6 Supplement Sign “No Hybrid Decals” with R93A (Introduction)  
 (Adoption Requested By Caltrans) (Henley)

## 6 Request for Experimentation

08-7 Request for Experimentation with new Warning Sign for Bicyclists (Introduction)  
 (Banks/Wong)

## 7 Discussion Items

08-8 Traffic Actuated signals for the Bicycles and Motorcycles (Introduction)  
 (Required due to AB 1581) (Henley)

08-9 Turn Prohibition signs on a Stop Sign Post and Boundary (Introduction)  
 (City Limit) Signs {outside Inquiry} (Henley)

08-10 Watch for Stopped Traffic (Introduction)  
 (Discussion Requested by Caltrans) (Henley)

## 8. Information Items

99-12 Speed Striping FOR Smart Crosswalks (Continued)  
 (Henley)

08-11 Section 7B.101(CA) TRAFFIC FINES DOUBLED Sign (SR59(CA)) (Introduction)  
 Delete this section, sign and CVC reference as it has sunsetted. (Henley)

08-12 Report Drunk Drivers – CALL 911 Signs (Introduction)  
 (Henley)

08-13 Minimum Levels of Sign Retroreflectivity (Introduction)  
 (Henley)

08-A Assembly Bill No. 321  
 Approved & filed on October 10, 2007, it amends CVC 22358.4 to allow an additional 15 mph prima facie speed limit when approaching at a distance of less than 500 ft from school and to provide a 25 mph prima facie speed limit when approaching at a distance of 500 ft to 1000 ft from school

### The following are Misc. Topics related to the HWA Activities:

NEW Final Rule published by FHWA in the Federal Register dated December 5, 2007  
 relating to Temporary Traffic Control Devices to decrease the likelihood of fatalities and injuries to road users, and to workers who are exposed to motorized traffic.  
<http://www.atssa.com/galleries/default-file/WorkZoneTTCDevices-FinalRule12-2007.pdf>

### UPCOMING WEBINARS:

Overview of the 2007 Notice of Proposed Amendments to the MUTCD  
 Co-hosted by ATSSA , NACE & IBTTA  
 February 11, 2008 10-11:30 a.m. CST  
[http://www.atssa.com/cs/root/education\\_certification/atssa\\_webinars](http://www.atssa.com/cs/root/education_certification/atssa_webinars)

Sign Retroreflectivity - New National Standards  
 Co-hosted by ATSSA , NACE & IBTTA  
 February 12, 2008 8:30-10:00 a.m. CST  
[http://www.atssa.com/cs/root/education\\_certification/atssa\\_webinars](http://www.atssa.com/cs/root/education_certification/atssa_webinars)

Official MUTCD Interpretations Issued by FHWA  
 January 26, 2007 -- 4-320(I)--Steady Yellow Arrow After Flashing Yellow Arrow  
[http://mutcd.fhwa.dot.gov/resources/interpretations/pdf/4\\_320.pdf](http://mutcd.fhwa.dot.gov/resources/interpretations/pdf/4_320.pdf)

#### FHWA's Policy Statements

FHWA has Terminated all Experimentations with the use of Yellow-Green Colored Pavement Markings for Crosswalks (December 21, 2006)  
<http://mutcd.fhwa.dot.gov/resources/policy/ygcrosswalkmarking/index.htm>

**FHWA's approval on permission to experiment with shared-lane pavement markings on roadways** within Sheboygan, Wis. (July 5, 2007), Albany, NY (May.16, 2007), Pittsburg, PA (April 12, 2007) and Flagstaff, AZ (April 12, 2007).  
<http://www.atssa.com/galleries/default-file/7-5d-07.pdf>  
<http://www.atssa.com/galleries/default-file/5-16a-07.pdf>  
<http://www.atssa.com/galleries/default-file/4-12a-07.pdf>  
<http://www.atssa.com/galleries/default-file/4-12-07.pdf>

FHWA's unacceptance on permission to experiment with the use of black numerals on the face of green signal indications to indicate speed limit by City of Garden Grove, CA (March 30, 2007).  
<http://www.atssa.com/galleries/default-file/3-30-07.pdf>

## 9. Tabled Item

06-7	MUTCD 2003 Revision No. 1 (Pharmacy Signing) (Proposed to Adopt Pharmacy Signing in CA)	(Continued) (Henley)
07-17	Proposal for C17A (CA) ROAD WORK Plaque and Amendment to CA MUTCD Section 6F.104 (Requested By Caltrans)	(Continued) (Henley)

## 10. Next Meeting

## 11. Adjourn

ITEM UNDER EXPERIMENTATION

- |       |  |             |
|-------|--|-------------|
| 01-9  | IN-ROADWAY WARNING LIGHTS AT R/R CROSSINGS<br>(Experiment requests by CPUC in cooperation Kern Co. & City of Fresno) | (Henley)    |
| 04-9  | Request to Experiment with “Watch The Road” Sign<br>(Experiment Agency – Los Angeles DOT)                            | (Bahadori)  |
| 04-10 | Slow for the Cone Zone Sign<br>(Experiment Agency – Caltrans)  | (Henley)    |
| 04-12 | Requests for experimentation with “Flashing Yellow Arrows”<br>(Experiment Agency – City of Fullerton and Pasadena)   | (Bahadori)  |
| 05-10 | Proposal for the Watershed Boundary Signs<br>(City of San Diego)   | (Henley)    |
| 06-5  | Clear The Way Signage (Drive Damaged Vehicle to Shoulder)<br>(Requested by CHP and MTC)                              | (Whiteford) |
| 07-19 | Wildlife Corridor Signage<br>(Request by County of San Bernardino)   | (Babico)    |

**STATUS OF CALTRANS ACTION ON PAST ITEMS**

- 01-1 U-TURN SIGNAL HEADS INDICATOR
- 02-15 Radar Guided Dynamic Curve Warning Sign
- 03-14 Numbering of Signalized Intersections
- 06-9 Proposal to adopt G12-1 (CA), G12-2 (CA), S22-1 (CA) and C43 (CA) signs
- 06-12 No Parking Signs
- 07-1 Proposal to revise the sizes for the Supplemental School Plaques (S4-3, W16-7p and W16-9p)
- 07-2 Three (3) Proposed Roadway Regulatory Signs
- 07-5 Proposal to Amend Section 2C.29 Advance Traffic Control Signs (W3-1, W3-2, W3-3, W3-4)
- 07-6 Delete the symbolic NO TURN ON RED (R10-11) sign
- 07-11 Veterans National Cemetery Signs
- 07-15 Proposal to Adopt "Safety Awareness Zone Next XX Miles"
- 07-12 Amendment to CA MUTCD Section 4E.08 Pedestrian Detectors
- 07-13 Experimental Process With New Traffic Control Devices
- 07-14 Process to Adopt Interim Approvals in California Issued by the FHWA
- 07-18 Proposal to Amend "FWY Detour With Arrow" SC9 (CA) Sign and Adopt "Exit With Arrow Sign"

**07-16 Amendment to Section 2B.13 of the CAMUTCD - Speed Limit as Discussed During the Oct 10, 2007 Workshop and Oct 11, 2007 CTCDC Regular Meeting (Formerly known as SB 848 as Amended)** (Page 6-7)

During the October 11, 2007 meeting, the CTCDC recommended to amend the policy of Speed Limit Sign (R2-1), Section 2B.13 of the CAMUTCD. Based on the CTCDC recommendation, a draft language was developed and shared with the Committee members. The following draft language is for the Committee's discussion and recommendation.

**Section 2B.13 Speed Limit Sign (R2-1)**

**Standard:**

After an engineering study has been made in accordance with established traffic engineering practices, the Speed Limit (R2-1) sign (see Figure 2B-1) shall display the limit established by law, ordinance, regulation, or as adopted by the authorized agency. The speed limits shown shall be in multiples of 10 km/h or 5 mph.

**Guidance:**

At least once every 5, 7 or 10 years, ~~States~~ State and local agencies should reevaluate non-statutory speed limits on segments of their roadways that have undergone a significant change in roadway characteristics or surrounding land use since the last review (see CVC 40802).

No more than three speed limits should be displayed on any one Speed Limit sign or assembly.

**Standard:**

When a speed limit is to be posted, it ~~should~~ shall be within ~~established at the nearest~~ 10 km/h or 5 mph ~~increment~~ of the 85th-percentile speed of free-flowing traffic.

**Option:**

The posted speed limit may be reduced by 10 km/h (5 mph) from the 10 km/h or 5 mph increment of the 85th-percentile speed, ~~where engineering study indicates the need for a reduction in speed to match the existing conditions with the traffic safety needs of the community~~ if unusual conditions not readily apparent to drivers, such as significantly higher collision rates or other factors exist, as long as those conditions are in compliance with all the appropriate sections of the CVC, especially CVC Section 22358.5.

**Standard:**

If used, a one-time 10 km/h or 5-mph reduction, according to CVC 22358.5, shall be documented in writing. The final, posted speed limit shall not be less the 50th-percentile speed

**Support:**

~~An example of the application of this speed limit criteria is as follows:~~

- ~~• If the 85<sup>th</sup> percentile speed in a speed survey was 60 km/h (37 mph), then the speed limit would be posted at 35 mph or optionally reduced to 30 mph. However,~~
- ~~• If the 85<sup>th</sup> percentile speed in a speed survey was 61 km/h (38 mph), then the speed limit would be posted at 40 mph or optionally reduced to 35 mph.~~

~~This method of establishing posted speed limits applies to all engineering and traffic surveys (E&TS) performed after May 20, 2004. This section, as amended for use in California, does not apply to E&TS performed prior to May 20, 2004.~~

**Examples:** • An Engineering and Traffic Survey (E&TS) performed on April 6, 1999 due for renewal on April 6, 2004 (5 years) would be performed per Chapter 8 of the 1996 Caltrans Traffic Manual, which was the applicable guidance at the time. This would then be due for renewal on April 6, 2009 using the California MUTCD criteria.

- However, if conditions of the E&TS and the applicable enforcement agency, its personnel and equipment meet provisions of CVC 40802.c.2.B.I, the E&TS could have been extended two additional years (for a total of 7 years). In this case, the posted speed limit(s) remain(s) enforceable for the seven-year period and would then be due for renewal on April 6, 2006 and would be renewed using California MUTCD criteria.
- Further, if at the end of the seven years, a registered engineer evaluates the highway section and determines that no significant changes in roadway or traffic conditions have occurred (see CVC 40802.c.2.B.II), the engineer could extend the E&TS for three additional years (for a total of 10 years). Renewal of the extended E&TS would then be deferred to April 6, 2009 and at that time performed with California MUTCD criteria.

**06-8 FHWA's Interim Approval for Optional Use of (Flashing Yellow Arrow) Traffic Control Devices**

The Sub-committee is scheduled to hold meeting on January 24, 2008 in Pasadena and will submit their report to the Committee on January 31, 2008 during the CTCDC meeting.



**04-10 Slow for the Cone Zone (SCZ)**

(Page 9-13)

The SCZ sign has been used on the “Construction Projects Funding Identification Signs” as shown on page 10 of 51.

The Department requests that the Committee makes recommendations for the adoption of stand-alone signs which could be used in work zones. The SCZ signs shown on page 11 and 12 of 51 will be used in conjunction with a speed limit sign as shown on the typical plan, page 13 of 51.

Highway workers say that for every collision, there are numerous close calls, underscoring the magnitude of the problem. The overwhelming consensus among highway workers and law enforcement officials is that motorists simply do not slow down and drive with caution in highway work zones.

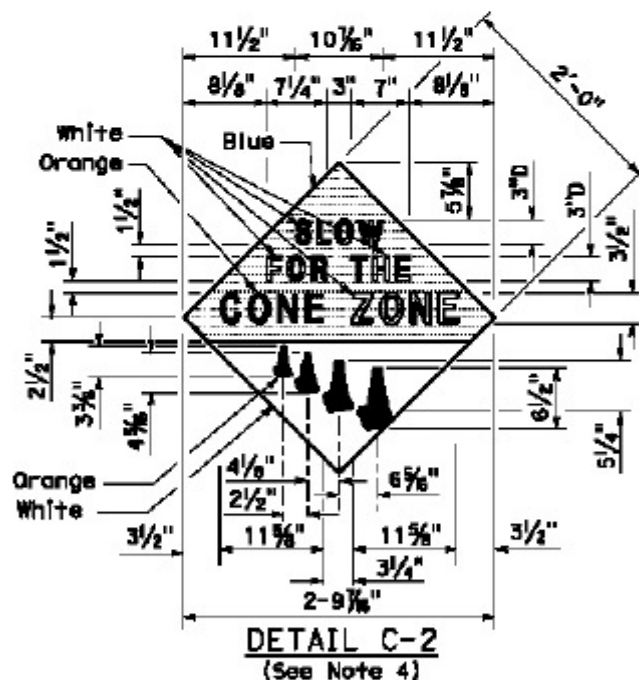
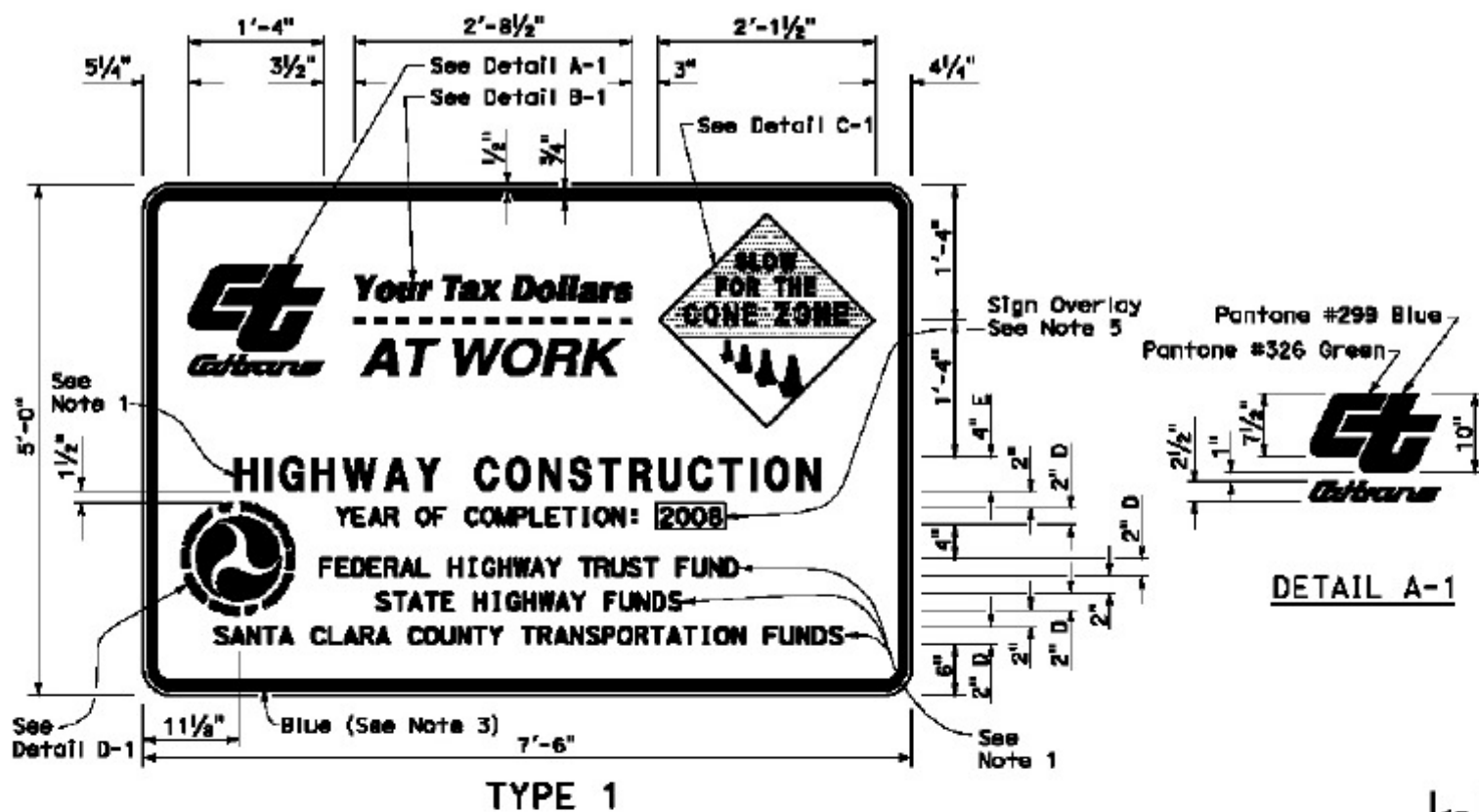
Without educating and reaching out to the California citizens statewide, the problem is expected to get worse. An additional factor is the number of teen drivers on the roadways. It is important to educate these inexperienced drivers about the dangers inherent to themselves and highway workers in work zones.

The additional traffic congestion will create a need for more night work in light of Caltrans’ commitment to minimize the amount of delay to motorists due to construction and maintenance activities. Reduced visibility at night and the increased number of motorist driving while fatigued or impaired by alcohol or drugs will create additional hazards for motorists and workers in construction zones.

Meanwhile, with responsibility for more than 50,000 lane-miles of California highway, Caltrans is faced with building and maintaining one of the largest transportation systems in the world.

Finally, there are increasing incidents of road rage reported by Caltrans and CHP field personnel. More and more, highway workers are observing aggressive and reckless driving by motorists incensed by traffic congestion, whether it is caused by roadwork, a collision or typical rush-hour delays.

The collision of these factors is inevitable; more cars, dangerous roadwork, more congestion, and shorter tempers. The number of collisions in work zones can be expected to show significant increases unless motorists across California are educated and their driving behaviors are modified. Caltrans would like to use these signs in work zone areas and request the Committee to make recommendations for the adoption.



## **STANDARD PLAN RSP T7**

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

## CONSTRUCTION PROJECT FUNDING IDENTIFICATION SIGNS

NO SCALE

RSP T7 DATED NOVEMBER 17, 2006 SUPERSEDES STANDARD PLAN T7  
DATED MAY 1, 2006 - PAGE 217 OF THE STANDARD PLANS BOOK DATED MAY 2006.



### Special

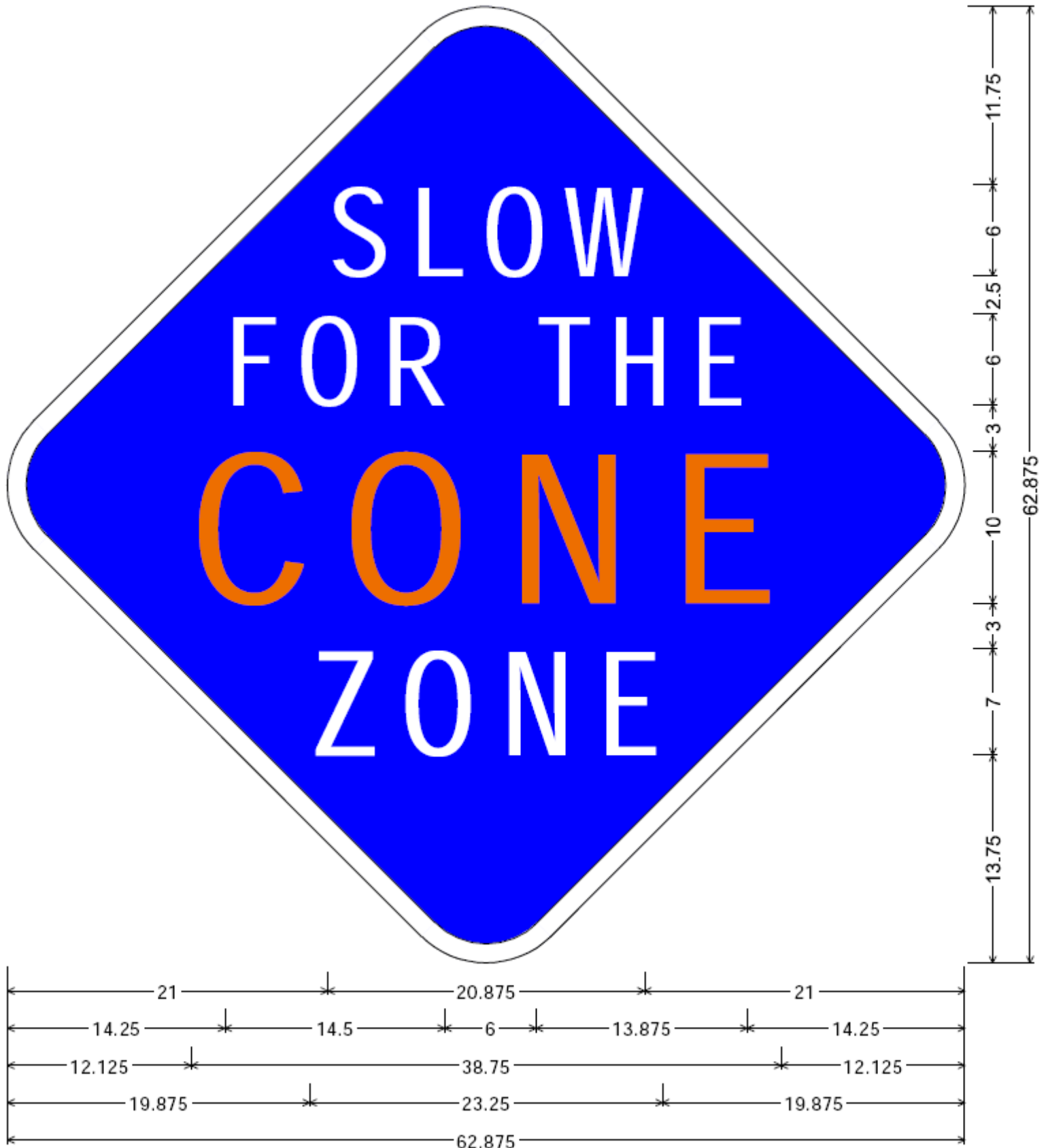
#### ENGLISH UNITS

A	B	C	D	E	F	G	H	J	K
114	78	1.25	9	8.5	19.5	32.5	38	4	14.5

#### METRIC UNITS

A	B	C	D	E	F	G	H	J	K
2896	1981	32	229	216	495	826	965	102	368

**5-Color Legend Sign**  
 Black, Blue, Orange,  
 Pantone Process Blue C (CT Logo),  
 Pantone Process Cyan C (CT Logo)

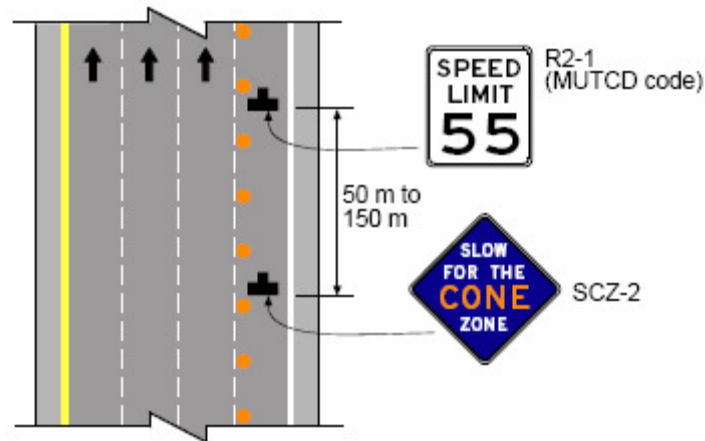


48.000" across sides 6.000" Radius, 1.250" Border, White on Blue;

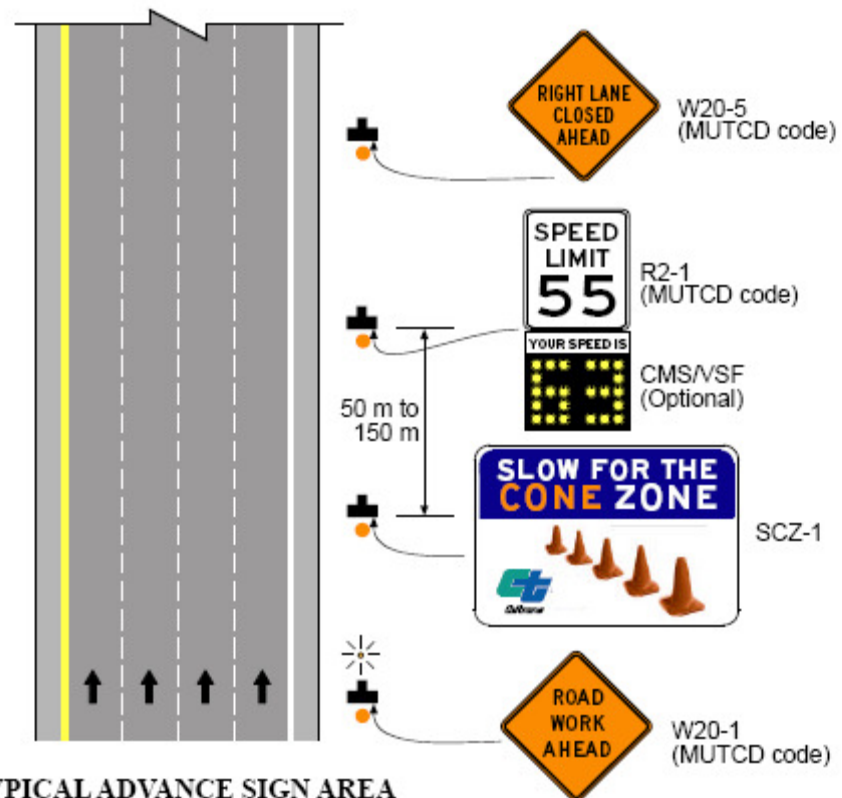
"SLOW" D; "FOR THE" D; "CONE" E; "ZONE" D;

LEGEND

- Traffic Cone
- Sign
- ← Direction of Travel
- ⚡ Flashing Beacon

**TYPICAL CONE ZONE AREA****NOTES:**

1. Refer to plans or Standard Plans for setup of lane closure. Advance Signs shown are example only.
2. Flags are not required on SCZ-1 sign.
3. When the SCZ-1 and/or SCZ-2 is used, it shall be followed by a SPEED LIMIT sign (R2-1).
4. The Changeable Message/Vehicle Speed Feedback (CMS/VSF) sign may be used below the SPEED LIMIT SIGN (R2-1).
5. The SCZ-2 may be placed at intermediate locations in the cone zone.

**TYPICAL ADVANCE SIGN AREA**

**08-1 Amendment Section 2B.112(CA) Daylight Headlight Signs (S30(CA) Series)**

*This policy in red text is being added as an option to use these signs, the current policy is only “when used” leaving the actual usage criteria unclear.*

**Section 2B.112(CA) Daylight Headlight Signs (S30(CA) Series)****Option:**

Daylight Headlight (S30(CA) Series) signs may be used after consultation with the local CHP office as a countermeasure in high accident locations on two lane highways where there is a potential for head-on collisions.

**Guidance:**

When used, the DAYLIGHT HEADLIGHT SECTION (S30-1(CA)) sign should be placed approximately 150 m (500 ft) in advance of a daylight headlight section.

When used, the TURN ON HEADLIGHTS NEXT X MILES (S30-2(CA)) sign should be placed at the beginning of a daylight headlight section.

When used, the END DAYLIGHT HEADLIGHT SECTION (S30-3(CA)) sign should be placed at the end of a daylight headlight section.

When used, the TURN ON HEADLIGHTS (S30-4(CA)) sign should be placed at the entrances from major side roads to a daylight headlight section.

When used, the CHECK HEADLIGHTS (S30-5(CA)) sign should be placed approximately 150 m (500 ft) beyond the end of a daylight headlight section.

**Support:**

Refer to CVC 21461 for enforcement of Daylight Headlight (S30(CA) Series) signs.

See Figure 2B-101(CA) for S30(CA) Series signs.

**08-2 Amendment to the Handicap Parking Signs and Striping**

(Page 15-22)

Caltrans request the Committee to make recommendations to adopt signs shown on pages 20 and 21 of page 51 and striping shown on page 22 to satisfy the requirements of AB1531.

**Assembly Bill No. 1531****CHAPTER 413**

An act to amend Section 14679 of the Government Code, and to amend Sections 22511.59, 22511.7, 22511.8, and 42001.13 of, and to add Section 22511.95 to, the Vehicle Code, relating to vehicles.

[Approved by Governor October 10, 2007. Filed with Secretary of State October 10, 2007.] legislative counsel's digest

**AB 1531, DeSaulnier. Vehicles: disabled parking.**

(1) Existing law authorizes a vehicle equipped with a special license plate, placard, or temporary placard indicating the person is a disabled person, disabled veteran, or an organization or agency involved in the transportation of disabled persons or disabled veterans, as specified, to exercise certain parking privileges, including parking or leaving standing a vehicle in a stall or parking place designated for a disabled person or disabled veteran. These spaces are distinguished by signs and markings placed pursuant to certain specifications.

This bill would limit the maximum consecutive number of times a person could renew a temporary disability placard to 6. Offstreet parking and parking facilities under the jurisdiction of a state or local agency would be required to state, on the signs designating a parking space as reserved for a disabled person and disabled veteran, the minimum amount a person could be fined for parking or leaving standing a vehicle in the space, without displaying the specified special license plate, placard, or temporary placard on the vehicle. If the loading and unloading area adjacent to a parking stall or space designated for disabled persons or disabled veterans is to be marked by a border and hatched lines, the border would be required to be painted blue and the hatched lines painted a suitable contrasting color to the parking space. Within the border the words "No Parking" would be required to be painted in white letters no less than 12 inches high. The new sign and painting requirements would be limited to parking space construction on or after July 1, 2008, and replacement signs and painting performed on or after July 1, 2008, or, for state controlled parking facilities and offstreet parking subject to local authority, as the State Architect deems necessary when renovations, structural repair, alterations, and additions occur to existing building and facilities on or after July 1, 2008. Because this bill would place additional duties on local agencies, the bill imposes a state-mandated local program. The bill would require all new or replacement signs installed after July 1, 2008, relating to parking privileges for disabled persons, to use "persons 91 with disabilities" rather than "disabled persons," when the reference is required.

(2) Existing law requires an unauthorized person who parks or leaves a vehicle standing in a space reserved for a disabled person or disabled veteran in an offstreet parking facility without displaying the required special license plate, placard, or temporary placard, to be subject to being convicted of an infraction and fined not less than \$250. This bill would require upon conviction of a first offense, a fine of not less than \$250 and not more than \$500 to be imposed. The bill would require upon conviction of a 2nd offense, a fine of not less than \$500 and not more than \$750 be imposed. Upon conviction of a 3rd offense, a fine of not less than \$750 and not more than \$1,000 would be required to be imposed. Because this bill would change the penalties for a crime, it would impose a state-mandated local program.

(3) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement. This bill would provide that with regard to certain mandates no reimbursement is required by this act for a specified reason. With regard to any other mandates, this bill would provide that, if the Commission on State Mandates determines that the bill contains costs so mandated by the state, reimbursement for those costs shall be made pursuant to the statutory provisions noted above.

*The people of the State of California do enact as follows:*

SECTION 1. Section 14679 of the Government Code is amended to read: 14679. (a) A parking facility under the jurisdiction or control of a state agency, that is available to private persons who desire to conduct business with the state agency, shall reserve for the exclusive use of any vehicle that displays either a special identification license plate issued pursuant to Section 5007 or a distinguishing placard issued pursuant to Section 22511.55 or 22511.59 a minimum of one parking space for up to 25 spaces, and additional parking spaces pursuant to Section 1129B of Part 2 of Title 24 of the California Code of

Regulations.

(1) (A) The space or spaces shall be reserved by posting immediately adjacent to and visible from such space or spaces a sign consisting of a profile view of a wheelchair with occupant in white on a blue background.

(B) The sign shall also clearly and conspicuously state the following: "Minimum Fine \$250," pursuant to Section 42001.13 of the Vehicle Code, imposed upon a person parking or leaving standing a vehicle in a stall or space designated for the use of disabled persons and disabled veterans, unless a special license plate issued pursuant to Section 5007 of the Vehicle Code or a distinguishing placard issued pursuant to Section 22511.55 or 22511.59 of the Vehicle Code is displayed on the vehicle. This subparagraph applies only to signs for parking spaces constructed on or after July 1, 2008, and signs that are replaced on or after July 1, 2008, or as the State Architect deems necessary when renovations, structural repair, alterations, and additions occur to existing buildings and facilities on or after July 1, 2008.

(2) The loading and unloading area of the pavement adjacent to a parking stall or space designated for disabled persons or disabled veterans shall be marked by a border and hatched lines. The border shall be painted blue and the hatched lines shall be painted a suitable contrasting color to the parking space. Blue or white paint is preferred. In addition, within the border the words "No Parking" shall be painted in white letters no less than 12 inches high. This paragraph applies only to parking spaces constructed on or after July 1, 2008, and painting that is done on or after July 1, 2008, or as the State Architect deems necessary when renovations, structural repair, alterations, and additions occur to existing buildings and facilities on or after July 1, 2008.

(b) If no parking facility under the jurisdiction and control of a state agency is available to private persons who desire to conduct business with the state agency, the state agency shall request the local authority having jurisdiction over streets immediately adjacent to the property of the state agency to provide parking spaces for the use of disabled persons and disabled veterans pursuant to Section 22511.7 of the Vehicle Code.

(c) The Department of General Services under the Division of the State Architect shall develop pursuant to Section 4450, as appropriate, conforming regulations to ensure compliance with subparagraph (B) of paragraph (1) of subdivision (a) and paragraph (2) of subdivision (a). Initial regulations to implement these provisions shall be adopted as emergency regulations. The adoption of these regulations shall be considered by the Department of General Services to be an emergency necessary for the immediate preservation of the public peace, health and safety, or general welfare. SEC. 2. Section 22511.59 of the

Vehicle Code is amended to read: 22511.59.

(a) Upon the receipt of the applications and documents required by subdivision (b), (c), or (d), the department shall issue a temporary distinguishing placard bearing the International Symbol of Access adopted pursuant to Section 3 of Public Law 100-641 commonly known as the "wheelchair symbol." During the period for which it is valid, the temporary distinguishing placard may be used for the parking purposes described in Section 22511.5 in the same manner as a distinguishing placard issued pursuant to Section 22511.55.

(b) (1) A person who is temporarily disabled for a period of not more than six months may apply to the department for the issuance of the temporary distinguishing placard described in subdivision (a).



(2) Prior to issuing a placard pursuant to this subdivision, the department shall require the submission of a certificate signed by a physician and surgeon, or to the extent that it does not cause a reduction in the receipt of federal aid highway funds, by a nurse practitioner, certified nurse midwife, physician assistant, chiropractor, or optometrist, as described in subdivision (b) of Section 22511.55, substantiating the temporary disability and stating the date upon which the disability is expected to terminate.

(3) The physician and surgeon, nurse practitioner, certified nurse midwife, physician assistant, chiropractor, or optometrist who signs a certificate submitted under this subdivision shall maintain information sufficient to substantiate that certificate and, upon request of the department, shall make that information available for inspection by the Medical Board of California or the appropriate regulatory board.

(4) A placard issued pursuant to this subdivision shall expire not later than 180 days from the date of issuance or upon the expected termination date of the disability, as stated on the certificate required by paragraph (2), whichever is less.

(5) The fee for a temporary placard issued pursuant to this subdivision shall be six dollars (\$6).

(6) A placard issued pursuant to this subdivision shall be renewed a maximum of six times consecutively.

(c) (1) A permanently disabled person or disabled veteran who is not a resident of this state and plans to travel within the state may apply to the department for the issuance of the temporary distinguishing placard described in subdivision (a).

(2) Prior to issuing a placard pursuant to this subdivision, the department shall require certification of the disability, as described in subdivision (b) of Section 22511.55.

(3) The physician and surgeon, nurse practitioner, certified nurse midwife, physician assistant, chiropractor, or optometrist who signs a certificate submitted under this subdivision shall maintain information sufficient to substantiate that certificate and, upon request of the department, shall make that information available for inspection by the Medical Board of California or the appropriate regulatory board.

(4) A placard issued pursuant to this subdivision shall expire not later than 90 days from the date of issuance.

(5) The department shall not charge a fee for issuance of a placard under this subdivision.

(6) A placard issued pursuant to this subdivision shall be renewed a maximum of six times consecutively.

(d) (1) A permanently disabled person or disabled veteran who has been issued either a distinguishing placard pursuant to Section 22511.55 or special license plates pursuant to Section 5007, but not both, may apply to the department for the issuance of the temporary distinguishing placard described in subdivision (a) for the purpose of travel.

(2) Prior to issuing a placard pursuant to this subdivision, the department shall require the applicant to submit either the number identifying the distinguishing placard issued pursuant to Section 22511.55 or the number on the special license plates.

(3) A placard issued pursuant to this subdivision shall expire not later than 30 days from the date of issuance.

(4) The department shall not charge a fee for issuance of a placard under this subdivision.

(5) A placard issued pursuant to this subdivision shall be renewed a maximum of six times consecutively.

(e) The department shall print on a temporary distinguishing placard, the maximum penalty that may be imposed for a violation of Section 4461. For the purposes of this subdivision, the "maximum penalty" is the amount derived from adding all of the following:

(1) The maximum fine that may be imposed under Section 4461.

(2) The penalty required to be imposed under Section 70372 of the Government Code.

(3) The penalty required to be levied under Section 76000 of the Government Code.

(4) The penalty required to be levied under Section 1464 of the Penal Code.

(5) The surcharge required to be levied under Section 1465.7 of the Penal Code.

(6) The penalty authorized to be imposed under Section 4461.3. SEC. 3. Section 22511.7 of the Vehicle Code is amended to read: 22511.7. (a) In addition to Section 22511.8 for offstreet parking, a local authority may, by ordinance or resolution, designate onstreet parking spaces for the exclusive use of a vehicle that displays either a special identification license plate issued pursuant to Section 5007 or a distinguishing placard issued pursuant to Section 22511.55 or 22511.59.

(b) (1) Whenever a local authority so designates a parking space, it shall be indicated by blue paint on the curb or edge of the paved portion of the street adjacent to the space. In addition, the local authority shall post immediately adjacent to and visible from the space a sign consisting of a profile view of a wheelchair with occupant in white on a blue background.

(2) The sign required pursuant to paragraph (1) shall clearly and conspicuously state the following: "Minimum Fine \$250," pursuant to Section 42001.13, imposed upon a person parking or leaving standing a vehicle in a stall or space designated for the use of a disabled person or disabled veterans, unless a special license plate issued pursuant to Section 22511.55 or Section 22511.59 is displayed on the vehicle. This paragraph applies only to signs for parking spaces constructed on or after July 1, 2008, and signs that are replaced on or after July 1, 2008.

(3) If the loading and unloading area of the pavement adjacent to a parking stall or space designated for disabled persons or disabled veterans is to be marked by a border and hatched lines, the border shall be painted blue and the hatched lines shall be painted a suitable contrasting color to the parking space. Blue or white paint is preferred. In addition, within the border the words "No Parking" shall be painted in white letters no less than 12 inches high. This paragraph applies only to parking spaces constructed on or after July 1, 2008, and painting that is done on or after July 1, 2008.

(c) This section does not restrict the privilege granted to disabled persons and disabled veterans by Section 22511.5. SEC. 4. Section 22511.8 of the Vehicle Code is amended to read:

22511.8. (a) A local authority, by ordinance or resolution, and a person in lawful possession of an offstreet parking facility may designate stalls or spaces in an offstreet parking facility owned or operated by the local authority or person for the exclusive use of a vehicle that displays either a special license plate issued pursuant to Section 5007 or a distinguishing placard issued pursuant to Section 22511.55 or 22511.59. The designation shall be made by posting a sign as described in paragraph (1), and by either of the markings described in paragraph (2) or (3):

(1) (A) By posting immediately adjacent to, and visible from, each stall or space, a sign consisting of a profile view of a wheelchair with occupant in white on a blue background.

(B) The sign shall also clearly and conspicuously state the following: "Minimum Fine \$250," pursuant to Section 42001.13, imposed upon a person parking or leaving standing a vehicle in a stall or space designated for the use of disabled persons and disabled veterans, unless a special license plate issued pursuant to Section 5007 or a distinguishing placard issued pursuant to Section 22511.55 or 22511.59 is displayed on the vehicle. This subparagraph applies only to signs for parking spaces constructed on or after July 1, 2008, and signs that are replaced on or after July 1, 2008, or as the State Architect deems necessary when renovations, structural repair, alterations, and additions occur to existing buildings and facilities on or after July 1, 2008.

(2) (A) By outlining or painting the stall or space in blue and outlining on the ground in the stall or space in white or suitable contrasting color a profile view depicting a wheelchair with occupant.

(B) The loading and unloading area of the pavement adjacent to a parking stall or space designated for disabled persons or disabled veterans shall be marked by a border and hatched lines. The border shall be painted blue and the hatched lines shall be painted a suitable contrasting color to the parking space. Blue or white paint is preferred. In addition, within the border the words "No Parking" shall be painted in white letters no less than 12 inches high. This subparagraph applies only to parking spaces constructed on or after July 1, 2008, and painting that is done on or after July 1, 2008, or as the State Architect deems necessary when renovations, structural repair, alterations, and additions occur to existing buildings and facilities on or after July 1, 2008.

(3) By outlining a profile view of a wheelchair with occupant in white on a blue background, of the same dimensions as in paragraph (2). The profile view shall be located so that it is visible to a traffic enforcement officer when a vehicle is properly parked in the space.

(b) The Department of General Services under the Division of the State Architect shall develop pursuant to Section 4450 of the Government Code, as appropriate, conforming regulations to ensure compliance with subparagraph (B) of paragraph (1) of subdivision (a) and subparagraph (B) of paragraph (2) of subdivision (a). Initial regulations to implement these provisions shall be adopted as emergency regulations. The adoption of these regulations shall be considered by the Department of General Services

to be an emergency necessary for the immediate preservation of the public peace, health and safety, or general welfare.

(c) If posted in accordance with subdivision (e) or (f), the owner or person in lawful possession of a privately owned or operated offstreet parking facility, after notifying the police or sheriff's department, may cause the removal of a vehicle from a stall or space designated pursuant to subdivision

(a) in the facility to the nearest public garage unless a special license plate issued pursuant to Section 5007 or distinguishing placard issued pursuant to Section 22511.55 or 22511.59 is displayed on the vehicle.

(d) If posted in accordance with subdivision (e), the local authority owning or operating an offstreet parking facility, after notifying the police or sheriff's department, may cause the removal of a vehicle from a stall or space designated pursuant to subdivision (a) in the facility to the nearest public garage unless a special license plate issued pursuant to Section 5007 or a distinguishing placard issued pursuant to Section 22511.55 or 22511.59 is displayed on the vehicle.

(e) Except as provided in Section 22511.9, the posting required for an offstreet parking facility owned or operated either privately or by a local authority shall consist of a sign not less than 17 by 22 inches in size with lettering not less than one inch in height which clearly and conspicuously states the following:

"Unauthorized vehicles parked in designated accessible spaces not displaying distinguishing placards or special license plates issued for persons with disabilities will be towed away at the owner's expense. Towed vehicles may be reclaimed at:

\_\_\_\_\_ or by telephoning  
(Address)

\_\_\_\_\_.  
(Telephone number of local law enforcement agency)

The sign shall be posted in either of the following locations:

(1) Immediately adjacent to, and visible from, the stall or space.

(2) In a conspicuous place at each entrance to the offstreet parking facility.

(f) If the parking facility is privately owned and public parking is prohibited by the posting of a sign meeting the requirements of paragraph (1) of subdivision (a) of Section 22658, the requirements of subdivision (c) may be met by the posting of a sign immediately adjacent to, and visible from, each stall or space indicating that a vehicle not meeting the requirements of subdivision (a) will be removed at the owner's expense and containing the telephone number of the local traffic law enforcement agency.

(g) This section does not restrict the privilege granted to disabled persons and disabled veterans by Section 22511.5. SEC. 5. Section 22511.95 is added to the Vehicle Code, to read: 22511.95. All new or replacement signs installed on or after July 1, 2008, relating to parking privileges for disabled persons shall refer to "persons with disabilities" rather than "disabled persons" or any other similar term, whenever the reference is required on the sign. SEC. 6. Section 42001.13 of the Vehicle Code is amended to read:

42001.13. (a) A person convicted of an infraction for a violation of Section 22507.8 shall be punished as follows:

(1) A fine of not less than two hundred fifty dollars (\$250) and not more than five hundred dollars (\$500) for the first offense.

(2) A fine of not less than five hundred dollars (\$500) and not more than seven hundred fifty dollars (\$750) for the second offense.

(3) A fine of not less than seven hundred fifty dollars (\$750) and not more than one thousand dollars (\$1,000) for three or more offenses.

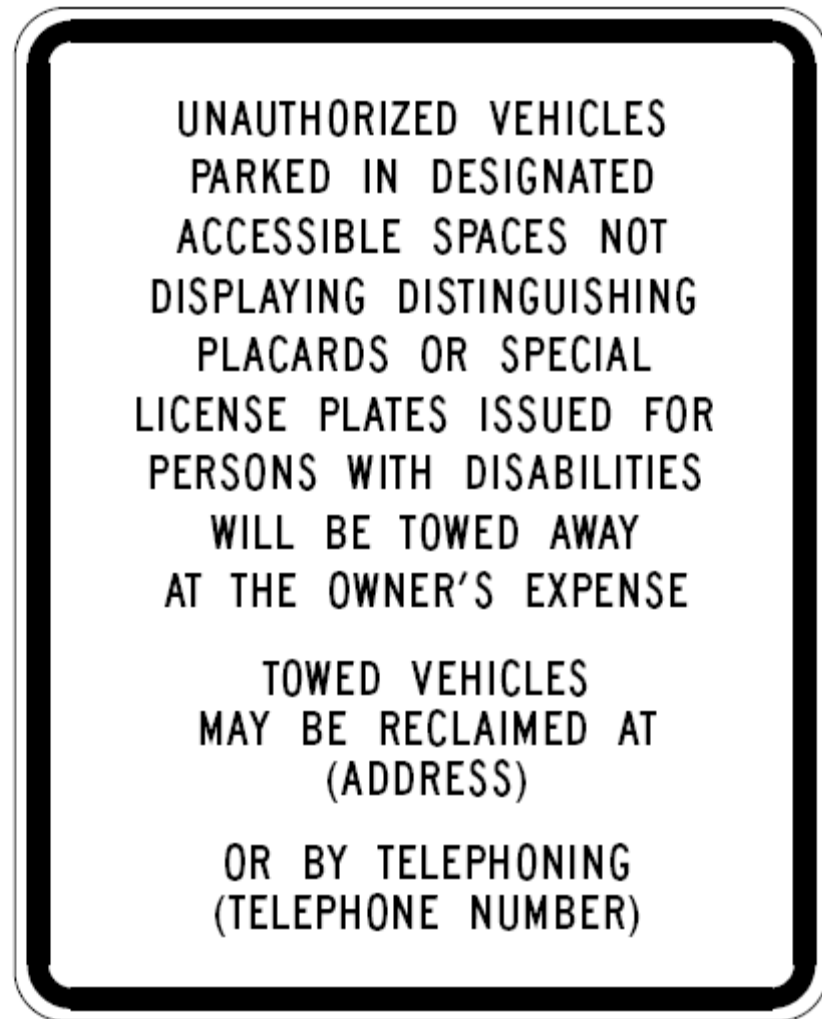
(b) The court may suspend the imposition of the fine if the person convicted possessed at the time of the offense, but failed to display, a valid special identification license plate issued pursuant to Section 5007 or a distinguishing placard issued pursuant to Section 22511.55 or 22511.59.

(c) A fine imposed under this section may be paid in installments if the court determines that the defendant is unable to pay the entire amount in one payment. SEC. 7. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution for certain costs that may

be incurred by a local agency or school district because, in that regard, this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution. However, if the Commission on State Mandates determines that this act contains other costs mandated by the state, reimbursement to local agencies and school districts for those costs shall be made pursuant to Part 7 (commencing with Section 17500) of Division 4 of Title 2 of the Government Code.



Existing Sign  
18" X 24"  
1" Series C Letters



Proposed Sign  
24" X 30" Sign  
1" Series C Letters



Existing R99 (CA)  
12" x 18"



Proposed R99 (CA)  
with new R99B (CA)  
supplemental plate  
Plate 12" x 9"



Proposed R99C (CA)  
new combined sign  
12" x 24"



Proposed upgrade of existing language in CA MUTCD, Section 3B.19 Pavement Word and Symbol Markings - - ( Page 3B-17 )

Maintain existing option for ISA symbol pavement marking

**Option:**

On narrow, low-speed shared-use paths, the pavement words and symbols may be smaller than suggested, but to the relative scale.

The International Symbol of Accessibility (ISA) parking space markings may be placed in each parking space designated for use by persons with disabilities. A blue background with white border may supplement the wheelchair symbol as shown in Figure 3B-19 3B-19(CA). ~~Also appropriate NO PARKING pavement markings may be placed on the accessibility aisle per Figure 3B-19(CA). Refer to California Code of Regulations Title 24, Section 1129B.4.~~

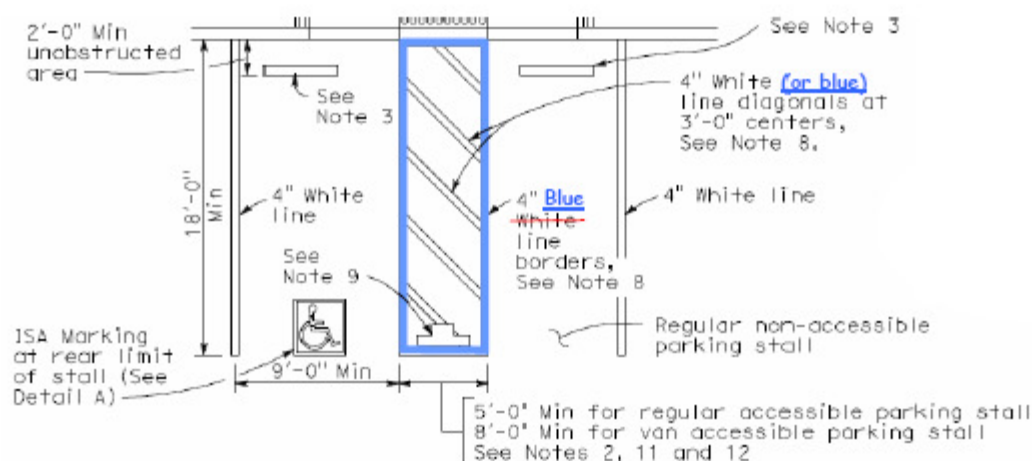
Add new standard language for accessibility aisle per AB 1531

**Standard:**

~~Also a~~ Appropriate NO PARKING pavement markings ~~may~~ **shall** be placed on the ~~accessibility aisle~~ **loading and unloading area** per Figure 3B-19(CA); **and, the loading and unloading area border shall be marked in blue paint. The border shall be painted blue and the hatched lines shall be painted a suitable contrasting color to the parking space. Blue or white paint is preferred. In addition, within the border the words "NO PARKING" shall be painted in white letters no less than 12 inches high.** Refer to California Code of Regulations Title 24, Section 1129B.4, and CVC Section 22511.7.

~~~~~

Proposed addition of simplified detail and edits to Figure 3B-19(CA) - - (concept)



This figure concept is adapted from California Department of California Standard Plan A90A (Note references to be deleted). The existing non-numbered note in Figure 3B-19 (CA) will be numbered #3 and edited to read:

- 3. Note:** The words "NO PARKING," shall be painted in the ~~accessibility aisle~~ **loading and unloading area** in white letters no less than 305 mm (12 in) high on a contrasting background and located so that it is visible to traffic enforcement officials. See Standard Plan A24E for square unit area for painted the legend "NO PARKING."

Replace "~~Accessibility Aisle~~" in subtitle with "**Loading and Unloading Area**," and add note #4 to Figure 3B-19 (CA):

- 4. Loading and unloading area border shall be marked in blue paint. The border shall be painted blue and the hatched lines shall be painted a suitable contrasting color to the parking space. Blue or white paint is preferred.**

**08-3      Amendment to CAMUTCD Section 4D.17 Visibility, Shielding, and Positioning of Signal Faces**  
(Page 23-24)

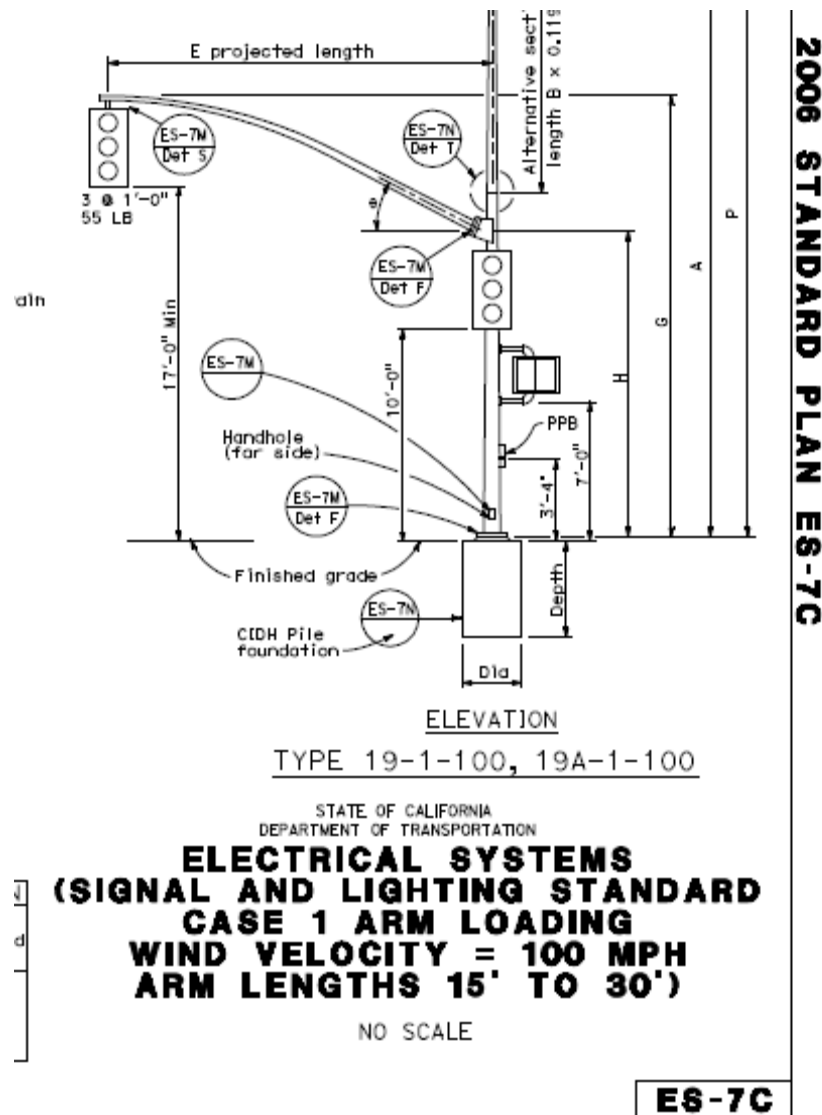
**Background:**

This omission in the current CA MUTCD created a discrepancy for State highway projects which have higher minimums and the change clarifies and reflects current official policy per Caltrans Standard Plans ES-7 Series (Shown on the following page). Caltrans requesting to the Committee to make recommendation for this correction.

**Section 4D.17 Visibility, Shielding, and Positioning of Signal Faces**

In Section 4D.17, fourth paragraph, first sentence is changed to:

“The bottom of the signal housing and any related attachments to a vehicular signal face located over a roadway shall be at least **5.2 m (17 ft) on State highways and** 4.6 m (15 ft) above the pavement **for other roadways**.”







Municipal Transportation Agency

Gavin Newsom | Mayor

Rev. Dr. James McCray Jr. | Chairman

Tom Nolan | Vice-Chairman

Cameron Beach | Director

Shirley Brayer Black | Director

Will Din | Director

Peter Mossey | Director

Leah Shahum | Director

Nathaniel P. Ford, Sr. | Executive Director/CEO

December 17, 2007

Devinder Singh  
Secretary - CTCDC  
Division of Traffic Operations  
California Department of Transportation  
1120 N Street, MS 36

Dear Mr. Singh,

On the following pages, you will find our request submitted to the California Traffic Control Device Committee (CTCDC) to adopt proposed new Bus Preferential Only Lane Signs.

At its meeting on October 11, 2007, the CTCDC adopted the MUTCD Bus Preferential Only Lane Signs into the CA MUTCD (item 07-23). Our submittal for the January 31, 2008 meeting is a follow-up request.

In order for all Bus Preferential Only Lane Signs to display a uniform design, the San Francisco Municipal Transportation Agency requests that the CTCDC adopt the proposed design of the BUS LANE AHEAD sign, the bus lane overhead sign, and the BUS LANE ENDS sign into the CA MUTCD. This proposed design is identical with R3-11b. Please refer to Attachment A.

If you have any questions regarding our request, please contact Joern Kroll of my staff at (415) 701-4555 or [Joern.Kroll@sfmta.com](mailto:Joern.Kroll@sfmta.com).

Sincerely,

Jack Lucero Fleck,

City Traffic Engineer

## Attachments:

Request to the CTCDC - January 31, 2008 meeting

MUTCD, Figure 2B-7

Attachment A: Existing and Proposed Bus Preferential Only Lane Signs

cc: Deborah Wong, CSAA, San Francisco

JLF:JM:JK:jk



Municipal Transportation Agency

Gavin Newsom | Mayor  
Rev. Dr. James McCray Jr. | Chairman  
Tom Nolan | Vice-Chairman  
Cameron Beach | Director  
Shirley Breyer Black | Director  
Wil Din | Director  
Peter Mezey | Director  
Leah Shahum | Director  
Nathaniel P. Ford, Sr. | Executive Director/CEO

### **Bus Preferential Only Lane Signs**

Request submitted by the San Francisco Municipal Transportation Agency

### **Request to the California Traffic Control Device Committee (CTCDC) to use proposed new Bus Preferential Only Lane Signs**

#### **Background:**

At the request of the San Francisco Municipal Transportation Agency, the CTCDC, at its meeting in October 2007, recommended and approved that Caltrans adopt signs R3-10a, R3-11b, R3-14b and BUS LANE ENDS into the CA MUTCD. Such an adoption allows California agencies to use preferential only lane signs for buses (transit vehicles) on urban streets.

#### **Proposed New Signs:**

The signs R3-10a, R3-11b, R3-14b as shown on the MUTCD, Figure 2B-7 (attached) do not display any diamond symbol in line with the MUTCD 2003 standard: "The diamond symbol shall not be used on the bus, taxi, or bicycle Preferential Only Lane signs" (Section 2B.26, Page 2B-26). These MUTCD signs and the BUS LANE ENDS sign are to be used in California following the CTCDC's decision on October 11, 2007.

All these signs signify bus preferential only lanes, yet each of their design is quite different. In order to provide a uniform design – similar to the series of "Car Pool" lane signs – , the San Francisco Municipal Transportation Agency proposes the following bus (transit) preferential only lane signs: R3-10a (CA), R3-11b (CA), R3-14b (CA), and R3-10c (CA). Their design is identical with [in case of R3-11b (CA)] or based on the design of R3-11b. For the list of MUTCD signs and proposed uniform bus preferential only lane signs, please see Attachment A.




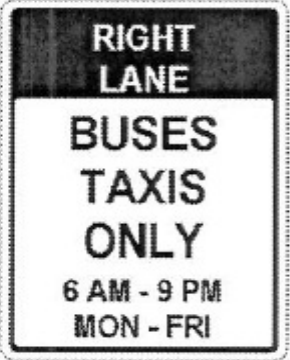


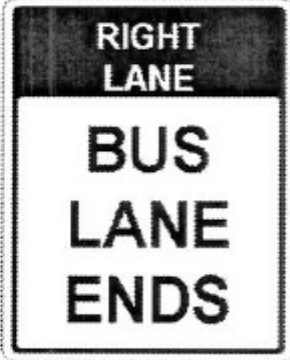
#### **Attachments:**

MUTCD, Figure 2B-7

Attachment A: Existing and Proposed Bus Preferential Only Lane Signs

## ATTACHMENT A

## EXISTING AND PROPOSED BUS PREFERENTIAL ONLY LANE SIGNS

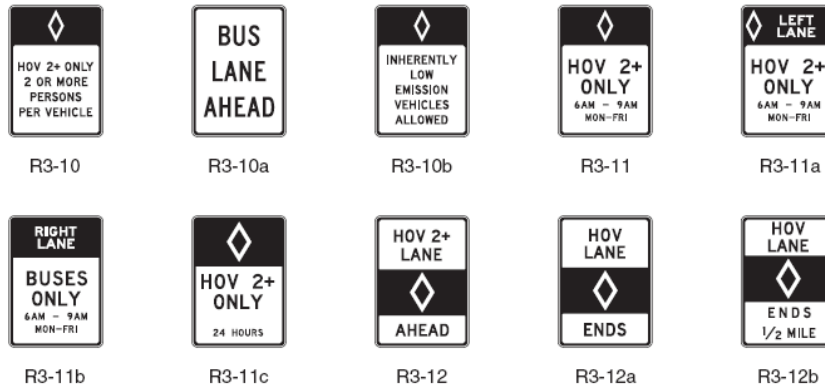
| MUTCD SIGNS                                                                                       | NEW CA MUTCD SIGNS PROPOSED BY CITY OF SAN FRANCISCO                                                                        |
|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
|  <p>R3-10a</p>   |  <p>R3-10a (CA)</p>                       |
|  <p>R3-11b</p>  |  <p>R3-11b (CA)</p>                      |
|  <p>R3-14b</p> |  <p>R3-14b (CA)</p>                     |
| <p><b>BUS LANE ENDS</b><br/>(sign does not exist)</p>                                             |  <p>R3-10c (CA) (proposed new code)</p> |

2003 Edition

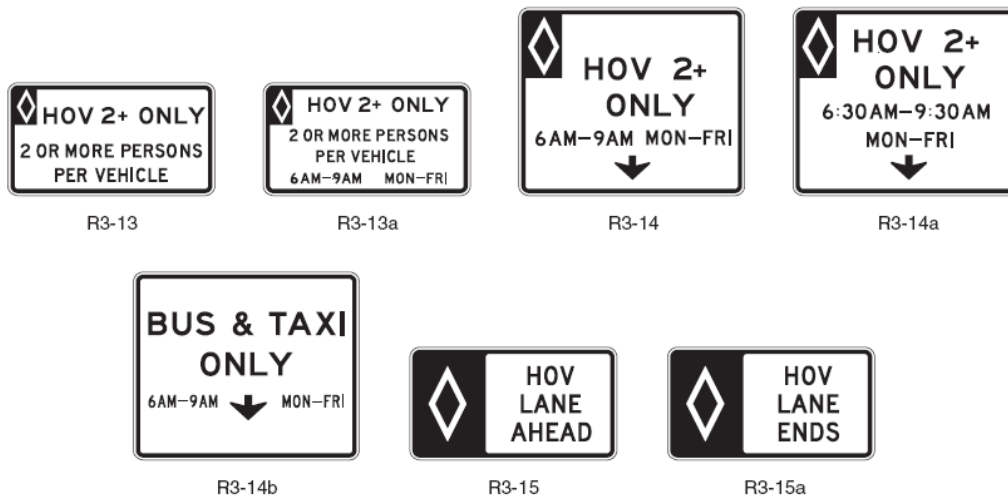
Page 2B-21

*Figure 2B-7. Examples of Preferential Only Lane Signs*

## GROUND-MOUNTED PREFERENTIAL ONLY LANE SIGNS



## OVERHEAD PREFERENTIAL ONLY LANE SIGNS



## Notes:

- The diamond symbol may be used instead of the word message HOV.
- The minimum vehicle occupancy requirement may vary for each facility (such as 2+, 3+, 4+).
- The occupancy requirement may be added to the first line of the R3-12a, R3-15, and R3-15a signs.
- Some of the legends shown on these signs are for example purposes only. The specific legend for a particular application should be based upon local conditions, ordinances, and State statutes.

**08-5      “No Double-Parking Anytime Commercial Vehicles Included” Double Fine Imposed, ??  
AM – ?? AM, ?? PM – ?? PM, MON – FRI** (Page 29)

The City of San Francisco would like the CTCDC to consider the adoption of a “No Double Parking” sign to enforce California Vehicle Code Section 22502(c). The purpose of the sign would be to regulate the double parking of commercial vehicles.

Under California Vehicle Code Section 22502(b), commercial vehicles are legally entitled to double-park if it is necessary for them to load or unload merchandise or passengers. However, local cities can prohibit this practice in certain areas by installing proper signage per CVC Section 22502(c). Unfortunately, the current California Sign Chart does not include a sign to specifically address this section.

The City of San Francisco would therefore propose the creation of a sign, similar in design to an R26 sign, with the legend NO DOUBLE PARKING ANYTIME, COMMERCIAL VEHICLES INCLUDED. The City also proposes the creation of a similar sign to impose a higher double-parking fine at certain times of the day. The second sign would have the following additional wording, depending upon the hours for the higher fines: DOUBLE FINE IMPOSED, 6 AM – 9 AM, 4 PM – 7 PM, MON – FRI.

The City is primarily interested in posting these signs along congested transit corridors where double-parked vehicles have been a problem. In San Francisco, double-parked commercial vehicles have been noted as a key factor in hindering public transit operations and causing buses to fall behind on their schedules. The San Francisco Board of Supervisors has also created an ordinance imposing a double fine for double parking during the main commute hours as a further means to discourage double parking.

The approval of the use of these signs would go hand-in-hand with City’s efforts to implement **Assembly Bill 101**, which was approved by the Governor on October 10, 2007. AB 101 allows the city of San Francisco to use bus-mounted cameras to enforce any parking violations within a transit-only lane. With the new signs, the City would be able to cite double-parked commercial vehicles that may be hindering transit operations.



**08-6 Supplement Sign “No Hybrid Decals” with R93A**

*HOV Lane Management Agenda Item Exhibit  
Transportation Director’s Meeting December 20, 2007*

Caltrans is requesting the Committee for the adoption of a supplement “No Hybrid Decals” sign which will be used with R93A sign as shown below:

At this time, two types of decals have been issued to motorists allowing them to drive their low emission vehicles in the carpool lanes without meeting minimum occupancy requirements. White decals have been issued to qualifying clean air vehicles with zero emissions such as natural gas and electric vehicles. Yellow decals have been issued to qualifying gasoline-electric hybrid vehicles. Federal law requires that the Department prohibit hybrid vehicle preferential access (yellow decals) on segments experiencing congestion if no other means to reduce congestion can be reasonably implemented. The white decals would not be prohibited in these areas.

Pending final decision by the California Governor’s Office and the Federal Highway Administration, the Department is preparing to install signs by March 2008 that indicate a segment of the HOV system where hybrid preferential access is prohibited. The “No Hybrid Decals” sign (see Exhibit) will be added underneath the existing “Clean Air Decals OK” signs in the median sign-standards on a limited portion of the HOV lane network by March 2008 to comply with federal law.

*Exhibit: Proposed Single Occupant Hybrid Vehicle Prohibition Sign*

*Existing  
R93A*



**36”x15”**

*Proposed*



**36”x9”**



**6. Experiment Requests:****08-7 Request for Experimentation with new Warning Sign for Bicyclists (Page 31-38)**

Gavin Newsom | Mayor  
Rev. Dr. James McCray Jr. | Chairman  
Tom Nolan | Vice-Chairman  
Cameron Beach | Director  
Shirley Breyer Black | Director  
Wil Din | Director  
Peter Mezey | Director  
Leah Shahum | Director  
Nathaniel P. Ford, Sr. | Executive Director/CEO

December 14, 2007

Devinder Singh  
Secretary, CTCDC  
California Department of Transportation  
1120 N Street  
Sacramento, CA 95814

Subject: Request for Experimentation – New Warning Sign for Bicyclists  
CTCDC Meeting Agenda, January 31, 2008

Dear Mr. Singh:

The City and County of San Francisco, Municipal Transportation Agency (SFMTA) respectfully requests CTCDC permission to experiment with the installation a new warning sign directed at bicyclists with the following wording:

- **“BICYCLISTS WATCH FOR PROHIBITED RIGHT TURNS”**

Two drawings, showing different wording and symbols for the proposed sign, are attached as Figure 1 and Figure 2.

Purpose

The purpose of this new warning sign is to convey a clear message to bicyclists that increases their awareness of vehicles traveling in the lane to their immediate left, and alerts bicyclists to the potential for those vehicles to turn right across the bicycle path of travel, a prohibited movement.

Description of Proposed Location

The primary impetus for this proposal is the unique intersection of Market Street and Octavia Boulevard/Central Freeway (the “subject intersection”). A schematic of the subject intersection is attached as Figure 3.

The eastbound Market Street approach to the subject intersection has four traffic lanes, including one bike lane: the left-most lane is a left-turn-only lane; the second lane from the left is a mixed-flow lane (streetcars and general vehicular traffic) with streetcar tracks; the third lane from the left is a through traffic lane; and the curb lane is a bike lane. The eastbound approach to the intersection is on a 6% downhill grade and curbside parking is prohibited.

The south leg of the subject intersection consists of the Central Freeway (US-101) on-ramp (two lanes southbound) and off-ramp (three lanes northbound).

Octavia Boulevard opened to traffic on September 9, 2005, replacing the elevated portion of the Central Freeway north of Market Street. The Octavia Boulevard design included a prohibition of right turns from eastbound Market Street onto the entrance to the Central Freeway at Octavia Boulevard, as legislated by the San Francisco Board of Supervisors in August 2004. Consequently, the design included standard traffic control devices to convey the No Right Turn regulation to motorists in accordance with applicable engineering standards.

Nature of the Problem / Other Efforts to Date

After the opening of Octavia Boulevard, SFMTA engineers observed that a majority of motorists complied with the No Right Turn regulation at the subject intersection, but a sizable minority began to violate it. Table 1 shows the number of illegal right turns observed by SFMTA staff from traffic counts performed between September 2005 and October 2006.

**TABLE 1**

| <b>Date</b>        | <b>Time of Counts</b> | <b>Illegal Right Turns</b> |
|--------------------|-----------------------|----------------------------|
| September 28, 2005 | 7a-8a                 | 33                         |
| January 24, 2006   | 7a-8a                 | 30                         |
| January 24, 2006   | 4p-5p                 | 8                          |
| January 25, 2006   | 7a-8a                 | 36                         |
| January 25, 2006   | 4p-5p                 | 16                         |
| October 26, 2006   | 8a-9a                 | 19                         |

Based on these observations SFMTA engineers installed the following additional traffic engineering measures at the subject intersection to reinforce the No Right Turn regulation:

- a) Three NO RIGHT TURN signs facing eastbound traffic, including a sign on the median island;
- b) Straight vertical green signal arrows (in the traffic signal) facing eastbound traffic to emphasize that turns are not allowed;
- c) NO TURN pavement messages;
- d) Painted white traffic island and safe-hit posts on the right side of the right most vehicular traffic lane;
- e) Larger guide signs at, in advance of, and past the subject intersection indicating alternative routes to the freeway; and
- f) An advance BICYCLE warning sign (W11-1).

A photograph depicting many of the improvements listed above is attached for reference as Figure 4.



Table 2 shows the number of illegal right turns observed by SFMTA staff from traffic counts performed in February 2007 and May 2007, after the installation of items a – f above.

**TABLE 2**

| <b>Date</b>      | <b>Time of Counts</b> | <b>Illegal Right Turns</b> |
|------------------|-----------------------|----------------------------|
| February 9, 2007 | 8a-9a                 | 3                          |
| May 1, 2007      | 7a-8a                 | 1                          |
| May 1, 2007      | 8a-9a                 | 0                          |
| May 1, 2007      | 4p-5p                 | 2                          |
| May 1, 2007      | 5p-6p                 | 0                          |
| May 2, 2007      | 4p-5p                 | 0                          |
| May 2, 2007      | 5p-6p                 | 0                          |
| May 9, 2007      | 7a-8a                 | 5                          |
| May 9, 2007      | 8a-9a                 | 1                          |

Specifically during the AM peak hours of 7:00 – 9:00 a.m., when the majority of illegal right turns were observed, a comparison summary of Tables 1 and 2 shows that there was an average of 29.5 illegal right turns per hour during the 17-month period before installing additional measures to reinforce the No Right Turn restriction (September 2005 – January 2007), and there was an average of only 2 illegal right turns per hour during the 4-month period after those measures were installed (February 2007 – May 2007).

However, although there was a decrease in the number of illegal right turns at the subject intersection from February 2007 through May 2007, the number of collisions between bicycles and illegally right turning vehicles increased during the same time period.

In the 14-month period *prior* to installing additional measures to reinforce the No Right Turn restriction, there were 6 right turn/bicycle collisions at the subject intersection, an average of 0.5 collisions per month. In the 9-month period *after*, there were 7 such collisions, an average of 0.8 collisions per month.

Thus, SFMTA efforts to reinforce the No Right Turn regulation at the subject intersection have succeeded in significantly reducing the incidence of illegal right turns, but to date these same efforts have proven unsuccessful in reducing the rate of bicycle-involved collisions.

In addition, in December 2007, SFMTA engineers replaced the painted traffic island and safe-hit posts (Item d, above) with a raised concrete traffic island, installed object markers atop the new island, installed new safe-hit posts and gore striping approaching the new island, and adjusted the lane extension markings through the

intersection. All with the goal of further reinforcing the No Right Turn regulation and making it physically more difficult for would be scofflaws to make this illegal turn.

Despite all of our efforts to date, it would be impossible to completely eliminate the occurrence of illegal right turns, and we believe that due to the significant reduction in the illegal right turns some cyclists may develop a false sense of security when riding through this intersection. Therefore, we believe it would be prudent to give cyclists advance notice of this unexpected condition, providing them with adequate time to slow down, stop, or take other evasive action, if necessary.

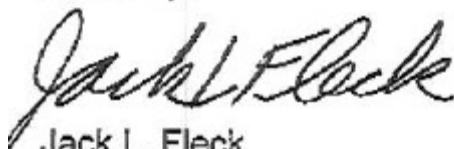
For all those reasons above, the SFMTA asks the CTCDC for favorable consideration of this request for experimentation.

This proposal has been discussed with Merry Banks and Deborah Wong of the California State Automobile Association (CSAA), and they have agreed to sponsor its placement on the CTCDC agenda.

Please direct all questions concerning this proposal to:

Damon R. Curtis, PE  
Associate Engineer  
San Francisco Municipal Transportation Agency  
1 South Van Ness Avenue, 7<sup>th</sup> Floor  
San Francisco, CA 94103  
tel: (415) 701-4674, email: [damon.curtis@sfmta.com](mailto:damon.curtis@sfmta.com)

Sincerely,



Jack L. Fleck  
City Traffic Engineer

cc: Damon R. Curtis, SFMTA  
Merry Banks, Manager, Special Projects, CSAA, San Francisco  
Deborah Wong, Transportation Policy Specialist, CSAA, San Francisco

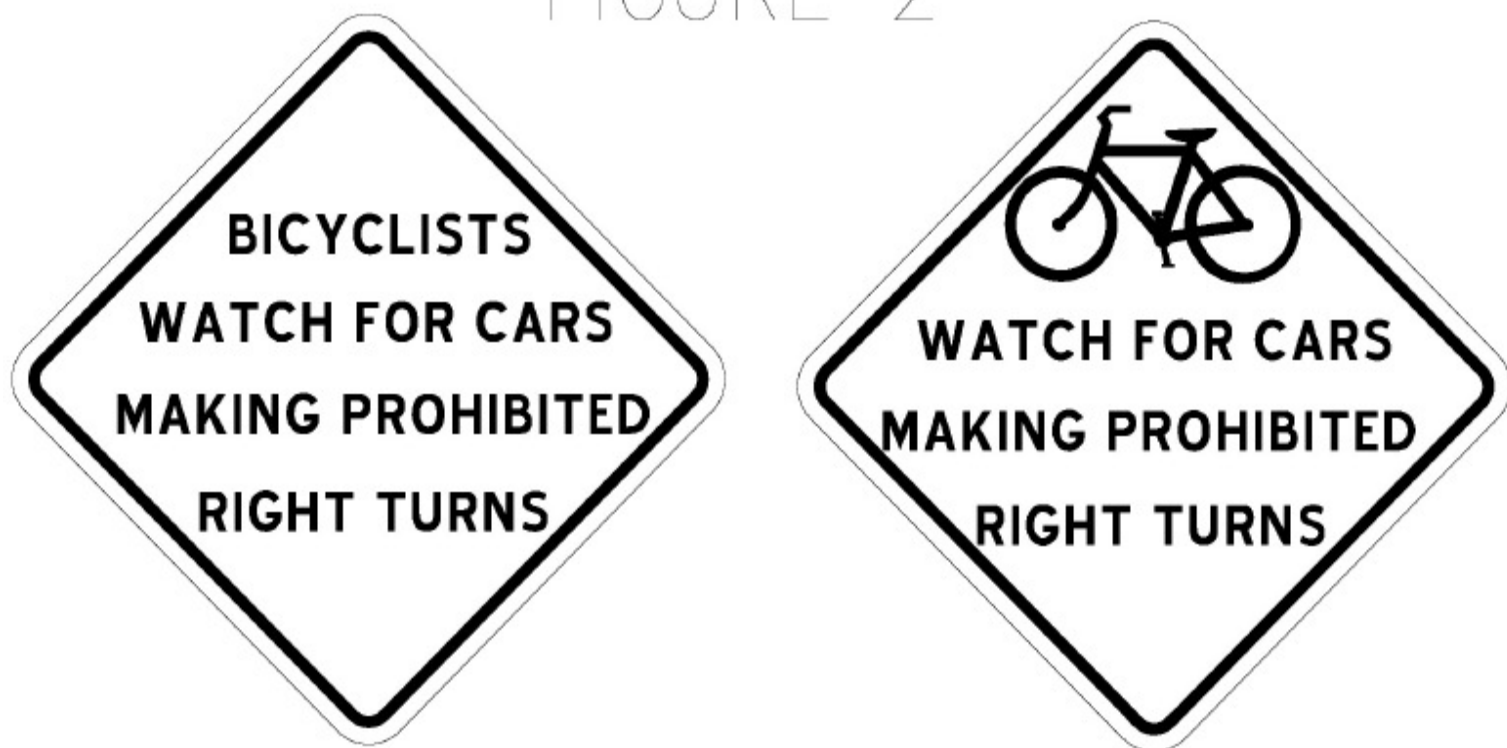
Attachments: Figure 1 – Proposed Warning Sign - Alt.1  
Figure 2 – Proposed Warning Sign - Alt.2  
Figure 3 – Market Street and Octavia Boulevard Existing Conditions  
Figure 4 – Photo of Market Street/Octavia Boulevard Intersection

FIGURE 1



24" with 2" lettering  
Black Text on Yellow Background

FIGURE 2



24" Sign with 1.75" lettering  
Black Text on Yellow Background

FIGURE 3

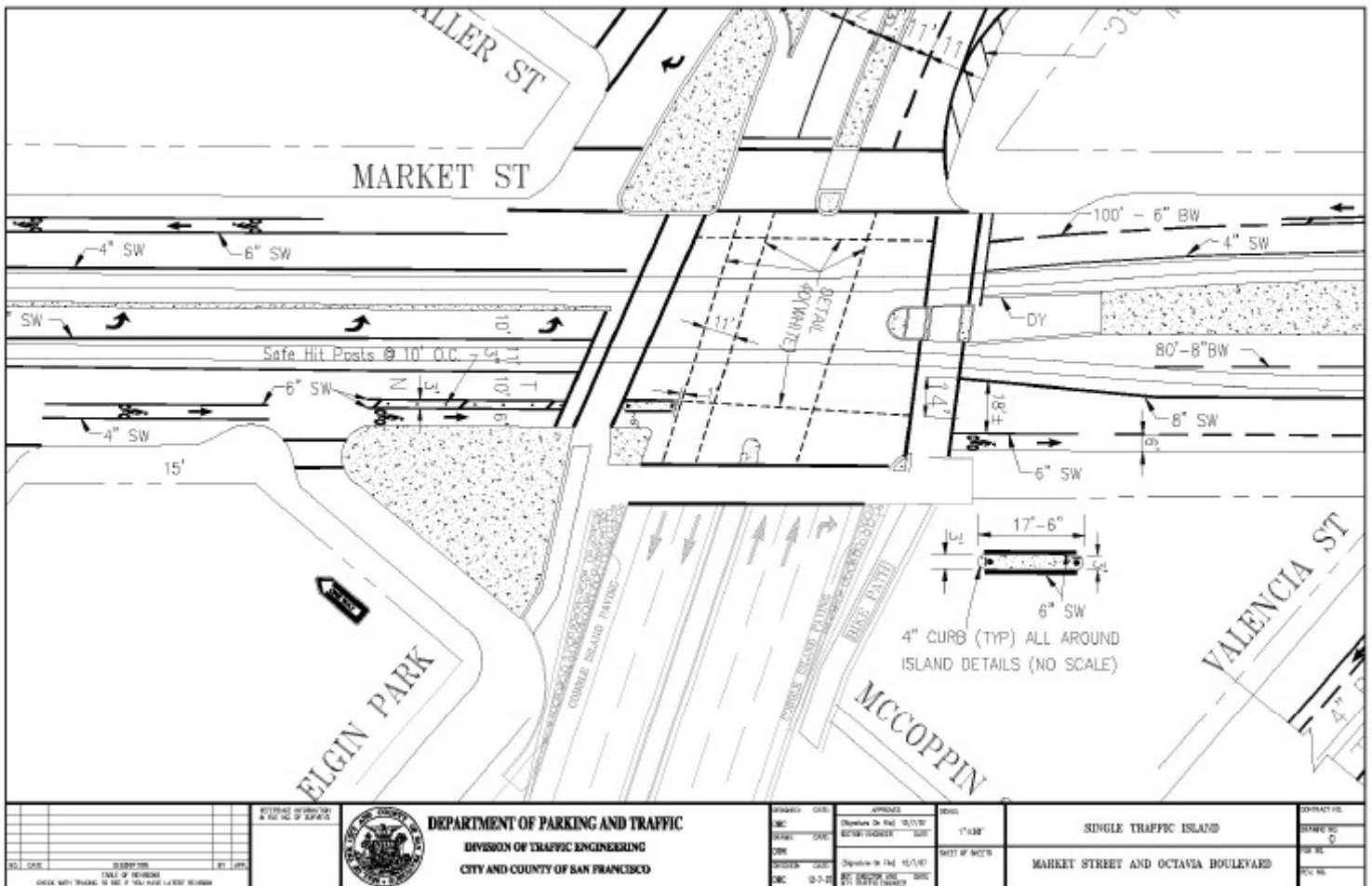


FIGURE 4





**7. Discussion Items:****08-8 Traffic Actuated signals for the Bicycles and Motorcycles**

(Page 39-40)

**Background:**

The following should provide detailed steps that Caltrans plans to take to address AB1581. The bill requires that the Department develop the standards and specifications in consultation with Cities and Counties, which means that the role of the California Traffic Control Devices Committee (CTCDC) is critical in successful development and deployment of these standards.

Currently, all types of inductive loops can detect motorcycles.

The video detection system and the Type "D" inductive loop are the current Caltrans standards to detect bicycles. The Department continues to study and evaluate various technologies, specifically the video systems to improve bicycle detection at signalized intersections.

The Department will work with CTCDC to develop standards and specifications for bicycle detection and related signal timing.

The current PATH research "Bicycle Detection and Concept of Operations at Signalized Intersections" will provide its recommendations on signal timing by June 2008.

The Traffic Signal Operations Committee of Caltrans will assess the outcome of the research and will then conduct field-testing at pilot intersections.

The Department will report to the CTCDC and present its recommendations on signal timing.

It is anticipated that the Standards and Specification for bicycle detection and related signal timing will be developed by early 2010.

**Assembly Bill No. 1581****CHAPTER 337**

An act to add and repeal Section 21450.5 of the Vehicle Code, relating to vehicles.

[Approved by Governor October 8, 2007. Filed with Secretary of State October 8, 2007.]

AB 1581, Fuller. Traffic-actuated signals: bicycles: motorcycles.

(1) Existing law provides for official traffic control devices. This bill would include as an official traffic control device a traffic-actuated signal that displays one or more of its indications in response to the presence of traffic detected by mechanical, visual, electrical, or other means. Upon the first placement of a traffic-actuated signal or replacement of the loop detector of a traffic-actuated signal, the signal would have to be installed and maintained, to the extent feasible and in conformance with professional engineering practices, so as to detect lawful bicycle or motorcycle traffic on the roadway. Cities and counties would not be required to comply with those requirements until the Department of Transportation has established uniform standards, specifications, and guidelines for the detection of bicycles and motorcycles by traffic-actuated signals and related signal timing. The Commission on State Mandates would be required to consult with the Department of Transportation regarding mandate claims relating to these provisions. This bill would provide that its provisions would remain in effect until January 1, 2018, and would be repealed on that date.

By imposing new duties on local government, this bill would impose a state-mandated local program upon local governments.

(2) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that, if the Commission on State Mandates determines that the bill contains costs mandated by the state, reimbursement for those costs shall be made pursuant to these statutory provisions.

*The people of the State of California do enact as follows:*

SECTION 1. (a) The Legislature hereby finds and declares the following:

(1) Bicyclists and motorcyclists are legitimate users of roadways in California.

(2) Traffic-actuated signals that do not detect bicycle or motorcycle traffic pose a danger to law-abiding bicyclists and motorcyclists.

(b) It is the intent of the Legislature in enacting this act to better protect law-abiding bicyclists and motorcyclists.

SEC. 2. Section 21450.5 is added to the Vehicle Code, to read:

21450.5. (a) A traffic-actuated signal is an official traffic control signal, as specified in Section 445, that displays one or more of its indications in response to the presence of traffic detected by mechanical, visual, electrical, or other means.

(b) Upon the first placement of a traffic-actuated signal or replacement of the loop detector of a traffic-actuated signal, the traffic-actuated signal shall, to the extent feasible and in conformance with professional traffic engineering practice, be installed and maintained so as to detect lawful bicycle or motorcycle traffic on the roadway.

(c) Cities, counties, and cities and counties shall not be required to comply with the provisions contained in subdivision (b) until the Department of Transportation, in consultation with these entities, has established uniform standards, specifications, and guidelines for the detection of bicycles and motorcycles by traffic-actuated signals and related signal timing.

(d) This section shall remain in effect only until January 1, 2018, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2018, deletes or extends that date. SEC. 3. The Commission on State Mandates shall consult with the Department of Transportation when it develops parameters and guidelines for any mandate claim arising from the enactment of these provisions to ensure that eligible reimbursement is limited solely to the incremental costs of installing sensor wiring that can detect bicycle or motorcycle traffic.

SEC. 4. If the Commission on State Mandates determines that this act contains costs mandated by the state, reimbursement to local agencies and school districts for those costs shall be made pursuant to Part 7 (commencing with Section 17500) of Division 4 of Title 2 of the Government Code.

— 2 Ch. 337 —



**08-9 Turn Prohibition Sign on a Stop Sign Post and Boundary (City Limit) Signs** (Page 41-47)

Caltrans would like to get Committee's input on the following inquiry initiated by Mr. Martin T. Lyon.

*Ct. Response*

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

ARNOLD SCHWARZENEGGER, Governor

**DEPARTMENT OF TRANSPORTATION****DIVISION OF TRAFFIC OPERATIONS**

1120 N STREET, MS 36

P. O. BOX 942873

SACRAMENTO, CA 94273-0001

PHONE (916) 654-5266

FAX (916) 654-6608

TTY 711



*Flex your power!  
Be energy efficient!*

October 26, 2007

Martin T. Lyon  
360 Buckingham Way #103  
San Francisco, CA 94132

Dear Mr. Lyon:

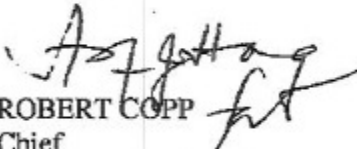
I have been asked to respond to your letter to Will Kempton, Director, California Department of Transportation, regarding a protocol for mounting a stop sign with a turn restriction or a turn permission sign on the same post. These are the Turn Prohibition and Mandatory Movement Lane Control signs referenced in the California Manual On Uniform Traffic Control Devices.

You make a good point about mounting these signs below the stop sign because the most prominent sign, the stop sign, should be on top. We will advocate your proposal at the next California Traffic Control Devices Committee meeting in January 2008. I appreciate your insight. It is very helpful.

If you have any questions, please contact Greg Edwards who will be more than glad to assist you with this matter and any future requests.

California Department of Transportation  
Attention: Greg Edwards  
1120 N Street, MS #36  
Sacramento, CA 95814  
Telephone: (916) 654-3507  
E-mail: greg.edwards@dot.ca.gov

Sincerely,

  
ROBERT COPP  
Chief

Division of Traffic Operations

Incoming -  
142

360 BUCKINGHAM WAY #103  
SAN FRANCISCO, CALIFORNIA 94132

05 October 2007

RECEIVED

OCT 19 2007

DIRECTOR'S OFFICE

CALIFORNIA DEPARTMENT OF TRANSPORTATION  
1120 N Street  
Sacramento, CA 95814

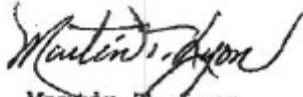
CALTRANS ACCOUNTS PAYABLE  
2007 OCT 11 PM 1:47

Dear Director:

At intersections where both a STOP sign along with a Turn Permission or Turn Restriction sign are both mounted on the same post on the corner or on a divider, I have seen some instances in which the STOP sign is above a Turn Permission or Turn Restriction sign, and in some other instances the Turn Permission or Turn Restriction sign above the STOP sign. Each sign is a Compliance Requirement sign for which a Sequenced Protocol applies when the motorist arrives at the intersection. First the motorist must come to a STOP and second when resuming driving the motorist may turn according to a Turn Permission sign or must NOT turn according to a Turn Restriction sign.

Coming to a STOP is First Priority, and Turn Permission or Turn Restriction is Second Priority therefore having the STOP sign mounted above the Turn Permission or Turn Restriction sign presents professional appearance of uniformity. Accordingly, recommend a Protocol or Directive be included in the MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) with a Compliance Sequence: First coming to a Stop, and Second adhere to Turn Permission or Turn Restriction whichever the latter sign applies.

Sincerely,

  
Martin T. Lyon

P.S. Inasmuch as the foregoing suggests amendment of the MUTCD this is of interest to the California Transportation Commission

2 of 2

## JURISDICTION SIGNAGE ON REPRESENTED BOUNDARIES

The MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) is replete with signage affecting motor vehicle traffic including jurisdictional name signs, i.e., STATE LINE, COUNTY LINE, and CITY LIMIT signs.

Although STATE LINE and COUNTY LINE signs are situated on the represented jurisdictional boundary, some CITY LIMIT signs are located well inside their established boundary by several feet. This suggests the MUTCD has not included a protocol or directive mandating the signs to be mounted on their respective boundary.

Recommend the MUTCD be amended to direct that JURISDICTIONAL NAME SIGNS BE MOUNTED ON THEIR REPRESENTING BOUNDARY.

*Incoming -*

360 BUCKINGHAM WAY #103  
SAN FRANCISCO, CALIFORNIA 94132

05 September 2007

**RECEIVED**

**SEP 10 2007**

**DIRECTOR'S OFFICE**

CALIFORNIA DEPARTMENT OF TRANSPORTATION  
ATTN: Mr. Will Kempton, Director  
1120 N Street  
Sacramento, CA 95814

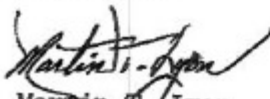
REF: Protocol for  
Posting a STOP Sign  
and Turn Prohibition  
Sign on the Same Pole

Dear Mr. Kempton:

At intersections where both a STOP sign and a Turn Prohibition sign are both mounted on the same post, at the immediate corner and on a divider, in some instances I have seen the STOP sign above and the Turn Prohibition sign beneath; in some other instances I have seen the Turn Prohibition sign above and the STOP sign beneath.

According to the California (or Federal) Manual for Uniform Traffic Control Devices (MUTCD), does a Protocol exist prescribing which sign is above and which one beneath? In case no such Protocol exists may I suggest developing and implementing same. Thank you.

Sincerely,

  
Martin T. Lyon

*Incoming -*

360 BUCKINGHAM WAY #103  
SAN FRANCISCO, CALIFORNIA 94132

05 September 2007

**RECEIVED**

**SEP 10 2007**

**DIRECTOR'S OFFICE**

CALIFORNIA DEPARTMENT OF TRANSPORTATION  
ATTN: Mr. Will Kempton, Director  
1120 N Street  
Sacramento, CA 95814

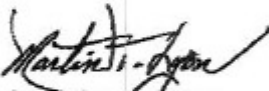
REF: Protocol for  
Posting a STOP Sign  
and Turn Prohibition  
Sign on the Same Pole

Dear Mr. Kempton:

At intersections where both a STOP sign and a Turn Prohibition sign are both mounted on the same post, at the immediate corner and on a divider, in some instances I have seen the STOP sign above and the Turn Prohibition sign beneath; in some other instances I have seen the Turn Prohibition sign above and the STOP sign beneath.

According to the California (or Federal) Manual for Uniform Traffic Control Devices (MUTCD), does a Protocol exist prescribing which sign is above and which one beneath? In case no such Protocol exists may I suggest developing and implementing same. Thank you.

Sincerely,

  
Martin A. Lyon

*Ct. Response*

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

GRAY DAVIS, Governor

## DEPARTMENT OF TRANSPORTATION

## DIVISION OF TRAFFIC OPERATIONS

1120 N STREET, MS 36

P. O. BOX 942873

SACRAMENTO, CA 94273-0001

PHONE (916) 654-2366

FAX (916) 653-6088

TTY (916) 653-4086

*Flex your power!  
Be energy efficient!*

October 3, 2002

Martin T. Lyon  
360 Buckingham Way, #103  
San Francisco, CA 94132

Dear Mr. Lyon:

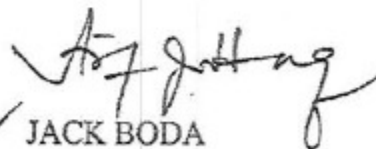
I am responding to your letter to Governor Gray Davis about posting jurisdiction limit (city and county) signs. You requested that the California Department of Transportation (Department) amend the State Traffic Manual to specify that boundary signs should be located within five feet of the exact location.

Generally, jurisdictional limit signs are posted at boundary lines. However, installers will exercise discretion when locating signs in proximity to intersecting roadways, bridges, underground utilities, traffic signs, rivers and other geographical features. Installers are aware that signs should be installed as close as practical to boundary lines.

Under California law, the Department must consult with local agencies to change the Traffic Manual. This is done through the California Traffic Control Devices Committee (CTCDC), which represents cities and counties. The Department will present your request to the CTCDC for consideration.

If you have any questions or need additional information, please contact Mr. Greg Edwards at (916) 654-3507.

Sincerely,

*for*   
JACK BODA  
Chief  
Division of Traffic Operations

*Incoming -*

360 BUCKINGHAM WAY #103  
SAN FRANCISCO, CALIFORNIA 94132

24 August 2002

Honorable Gray Davis  
Governor of California  
State Capitol Building  
Sacramento, CA 95814

Dear Governor Davis:

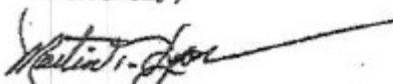
It is a reasonable assumption on California Citizens' part that State-published directives/instructives warrant inclusion of vital data. This includes the State Traffic Manual. Recently I noted that two city limit signs were posted a considerable number of feet from their respective, common border on Rollins Road which traverses through these cities, to wit: Burlingame and Millbrae. Having written to the Millbrae Traffic Engineer, he advised me that he had no intention to relocate the sign to its correct location citing the fact that the State Traffic Manual did not require signs to be on the boundary (for) which the sign serves.

Local jurisdictions, i.e., Counties and Municipalities adhere to the State Traffic Manual for uniformity. On Federal or State Highways/Freeways including such thoroughfares traversing through counties and municipalities, the California Department of Transportation (CALTRANS) posts the signs.

It is an absolute outrage, i.e., unconscionable and unacceptable, misleading and misserving the general public, specifically, the motoring public to have omitted accurate on-the-spot posting of jurisdictional limit signs.

It is my view and judgement that on the traveled terrain, the sign denoting the border must be posted on the very boundary line it represents just as on the maps the drawn line must be shown at it represented place. Accordingly, I would strongly urge the State Traffic Manual be amended to include signs for borders on the exact spot or in close proximity of same, preferably not more than five feet.

Sincerely,

  
Martin T. Lyon

Encl:

**08-10        Watch for Stopped Traffic**

Caltrans District 8 stated that the CAMUTCD has a warning sign that uses the word "Watch". This sign is "WATCH DOWNHILL SPEED".

Caltrans District 8 requested that the CTCDC should discuss whether a sign with a message "WATCH FOR STOPPED VEHICLES" is appropriate to use in certain conditions. They believe that "WATCH FOR STOPPED VEHICLES" sign gives a much clearer message to motorists compare to the "BE PREPARED TO STOP" sign. The former sign is more like an advisory for motorist to be aware of while the latter might confuse motorists who might think this sign to mean that have to stop for some reason like an sobriety check point or Ag Station or Homeland Security check point. Similar to STOP AHEAD signs.

The reason this is a discussion item is because Caltrans would like to see Committee's opinion on this request. If Committee agrees with the Caltrans District 8 request then, then this item will be placed under the action items for the next CTCDC meeting.



**8. Information Items:****99-12 Speed Striping For Smart Crosswalks**

Caltrans District 7 requested to experiment with speed striping for smart crosswalks, however this experiment was never implemented. This is just an information for the Committee that District 7 will be informed that experimentation authorization has been canceled and if the District 7 would like to proceed with this experimentation, they need to submit a new proposal to the Committee for approval.

**08-11 Section 7B.101(CA) TRAFFIC FINES DOUBLED Sign (SR59(CA))**

Delete this section, sign and CVC reference as it has sunsetted.

Standard:

When used, the TRAFFIC FINES DOUBLED (SR59(CA)) sign shall be placed below the School Advance Warning (S1-1) sign. It shall only be used in specially posted school zones in Alameda, Santa Barbara and

Ventura Counties or in a city in any of these counties as specified in CVC 42011. The SR59(CA) sign shall

remain in effect only until January 1, 2007, unless an enacted statute deletes or extends this date.

**08-12 REPORT DRUNK DRIVERS – CALL 911 Signs**

The California Office of Traffic Safety (OTS), California Highway Patrol (CHP), California Department of Transportation (Caltrans), Department of Motor Vehicles (DMV) and Department of Alcoholic Beverage Control (ABC) are working on plans for a holiday DUI crackdown, which includes the installation of 'Report Drunk Drivers. Call 911' roadway signs throughout California in conjunction with the media campaign. In response to this campaign, Caltrans will be installing 759 signs, resulting in one sign every 40 miles in each direction on the entire State highways by June 2008.



**08-13 Minimum Levels of Sign Retroreflectivity**

FHWA has issued Revision No. 2 to their MUTCD 2003 Edition. It primarily deals with minimum levels of sign retroreflectivity. Please be aware that this MUTCD revision is not effective immediately in California but we have a maximum of 2 years within which to incorporate this revision 2 into the California MUTCD.

More information is available at the MUTCD home page at the following web link:  
<http://mutcd.fhwa.dot.gov/>

**Revision Number 2 to the 2003 Edition of MUTCD**

A Final Rule on Sign Retroreflectivity has been published in the Federal Register on December 21, 2007. This Final Rule adopts revisions to the current 2003 edition of the MUTCD. The revisions affect the MUTCD Introduction, Part 1, and Chapter 2A, plus minor editorial changes to cross-references in Chapters 2B and 6F. This set of revisions is Revision No. 2 to the 2003 edition of the MUTCD. The most current edition of the MUTCD is now the 2003 Edition with Revisions 1 and 2 incorporated.

The Federal Register notice of the Final Rule for Revision Number (No. 2) can be viewed at:  
<http://mutcd.fhwa.dot.gov/res-notices.htm>

A document showing the specific changes to the MUTCD that are included in Revision No. 2 can be viewed at: (HTML, PDF 70KB

For more information and background on Revision No. 2, please visit FHWA's Sign Retroreflectivity Web site at [http://safety.fhwa.dot.gov/roadway\\_dept/retro/sign/sign\\_retro.htm](http://safety.fhwa.dot.gov/roadway_dept/retro/sign/sign_retro.htm).